

FIG.1

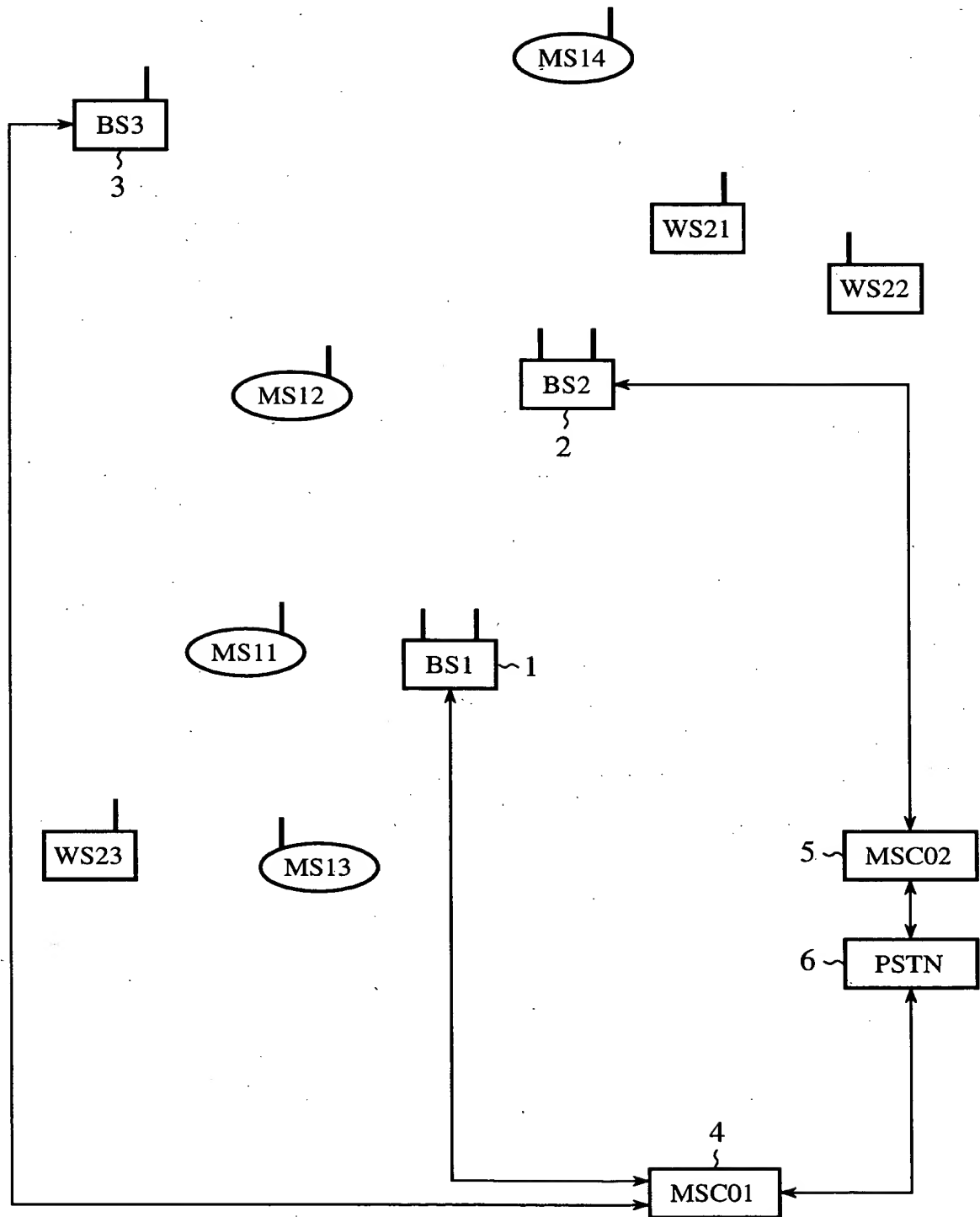
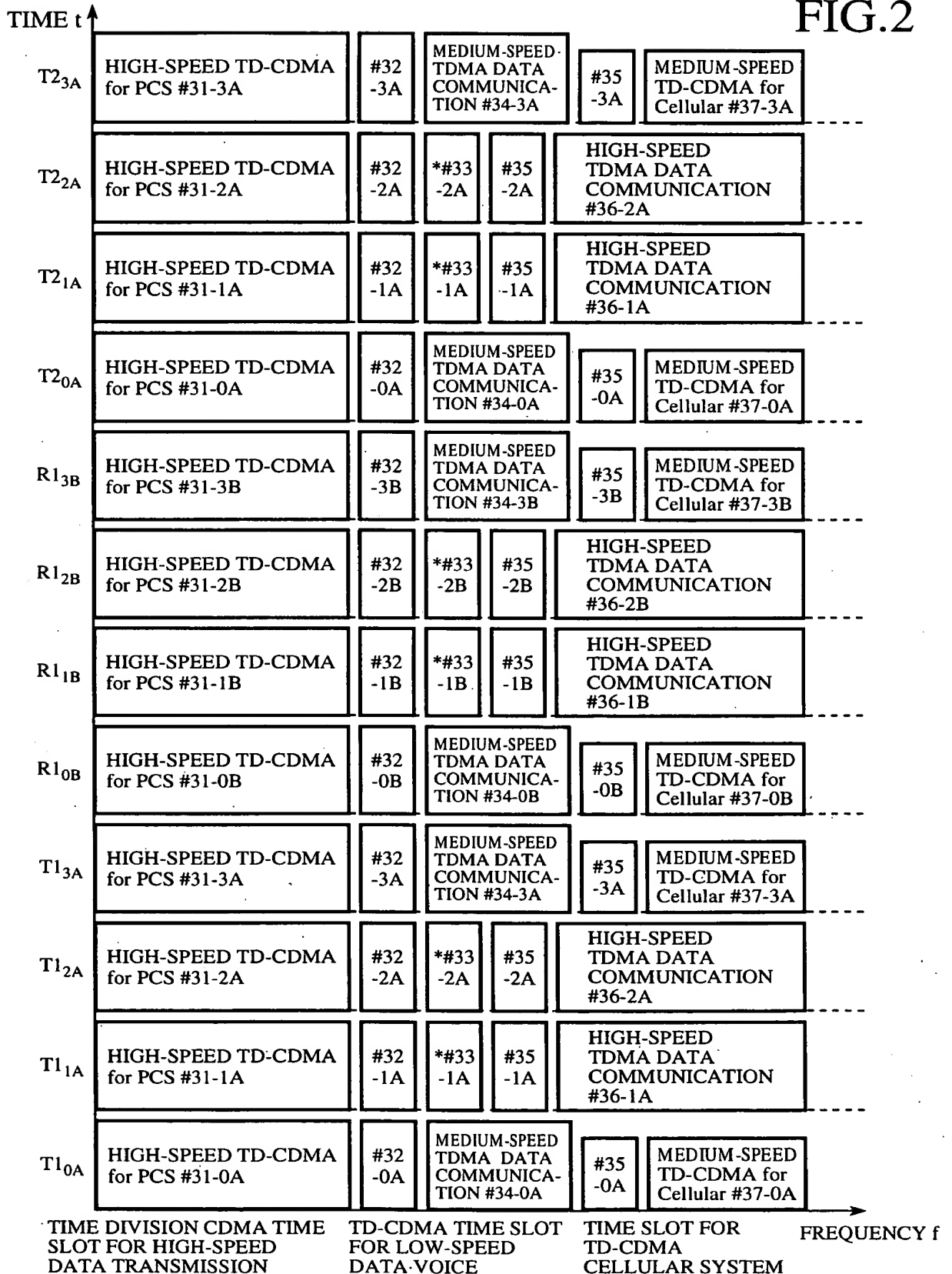
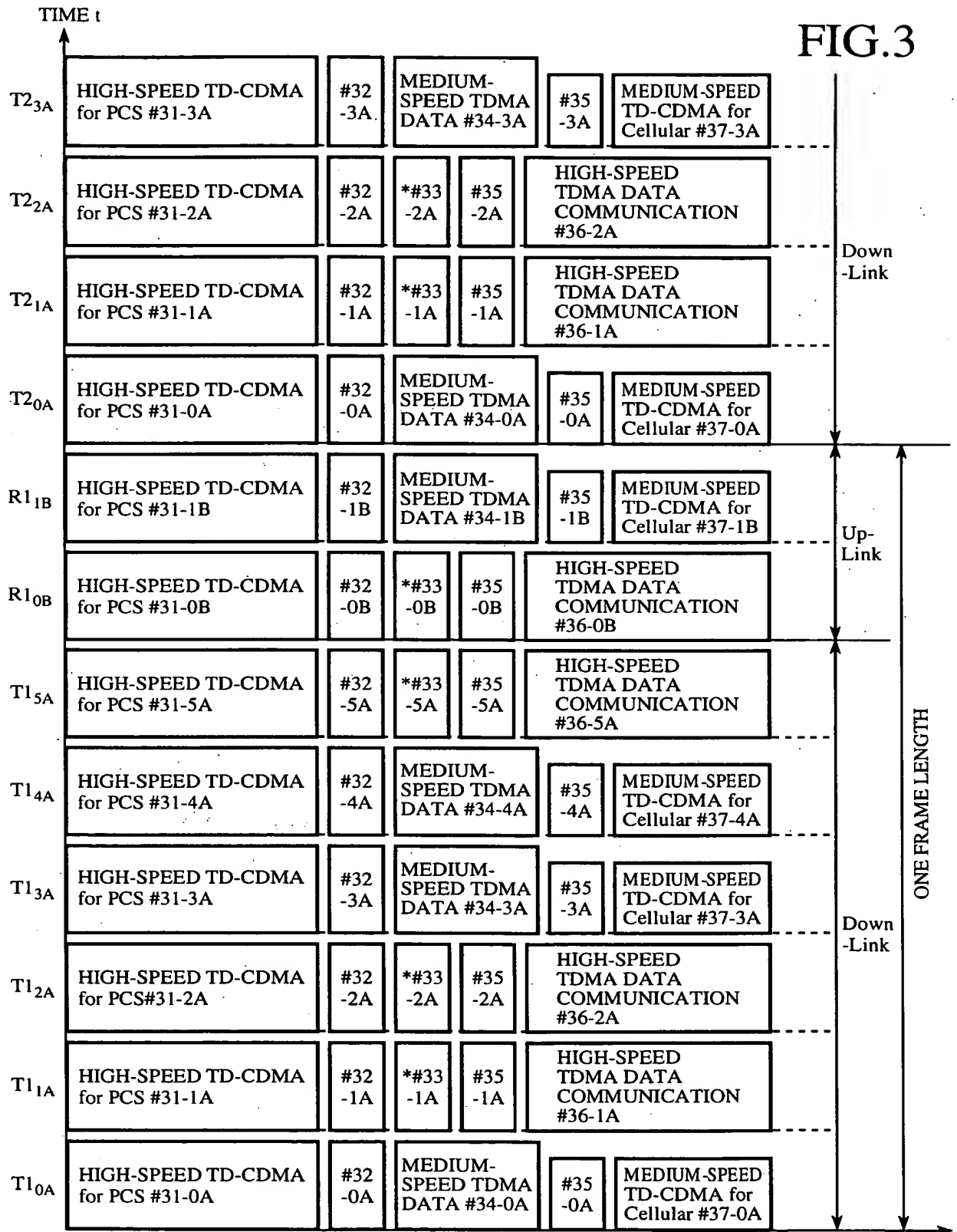


FIG.2



MOBILE COMMUNICATION SYSTEM SHARING TIME DIVISION CDMA SIGNAL AND TDMA SIGNAL (SHOWING TDD UP/DOWN-LINK NOTE: \*#33 INDICATES TDMA)

FIG.3



TIME DIVISION CDMA TIME  
SLOT FOR HIGH-SPEED  
DATA TRANSMISSION

TD-CDMA TIME SLOT  
FOR LOW-SPEED  
DATA-VOICE

TIME SLOT FOR  
TD-CDMA  
CELLULAR SYSTEM

FREQUENCY  $f$

MOBILE COMMUNICATION SYSTEM SHARING TIME DIVISION CDMA SIGNAL AND TDMA  
SIGNAL (SHOWING ASYMMETRICAL TDD UP/DOWN-LINK NOTE: \*#33 INDICATES TDMA)

# FIG.4

## EXAMPLES OF MOBILE STATION SWITCHING TIME-USABLE TRANSMISSION RATES

NO.	MOBILE STATION NO.	SWITCHING TIME (ms)	USABLE DATA TRANSMISSION RATE (kbps)
MS11	19980428	0.1	UP: INTERMITTENT 1,2,4,8,32,1024 DOWN: INTERMITTENT 1,2,4,8,32,1024,2048
MS12	19980429	0.2	UP: INTERMITTENT 1,2,32,1024 DOWN: INTERMITTENT 1,2,32,1024,4096
MA13	19980501	0.1	UP: INTERMITTENT 1,2,4,8,32 DOWN: INTERMITTENT 1,2,4,8,32,1024
MA14	19980503	10.0	UP: INTERMITTENT 1,2,8 DOWN: INTERMITTENT 1,2,4,8,32,1024,4096
WS21	19980601	0.2	UP: INTERMITTENT 1,2,32,1024 DOWN: INTERMITTENT 1,2,32,1024,4096
WS22	19980605	5.0	UP: INTERMITTENT 1,2,4,8,32,4096 DOWN: INTERMITTENT 1,2,4,8,32,1024
WS23	19980614	0.1	UP: INTERMITTENT 1,2,4,8,32,1024 DOWN: INTERMITTENT 1,2,4,8,32,1024,2048

(EXAMPLE OF MOBILE STATION INFORMATION MEMORY IN MSC)

FIG.5

**ASSIGNMENT OF PLURAL CHANNELS AND  
STATE-OF-USE DISPLAY MEMORY**

MOBILE STATION NO.	SWITCHING TIME (ms)	Up-Link/ Down-Link	1ST CHANNEL USE/NONUSE	2ND CHANNEL USE/NONUSE	3RD CHANNEL USE/NONUSE	4TH CHANNEL USE/NONUSE
19980428 (MS11)	0.1	Up	INTERMITTENT #35-0B	<u>1kbps</u> <u>#32-0B</u>	8kbps #32-3B	1024kbps #31-0B
		Down	INTERMITTENT #35-0A	2kbps #32-1A	32kbps #37-0A	<u>2048kbps</u> <u>#31-1A</u>
19980429 (MS12)	0.2	Up	<u>INTERMITTENT</u> <u>#35-0B</u>	1kbps #32-0B	32kbps #37-0B	1024kbps #31-0B
		Down	<u>INTERMITTENT</u> <u>#35-0A</u>	4kbps #32-2A	32kbps #37-0A	4096kbps #31-2A
19980501 (MS13)	0.1	Up	INTERMITTENT #35-0B	1kbps #32-0B	<u>32kbps</u> <u>#37-0B</u>	
		Down	<u>INTERMITTENT</u> <u>#35-0A</u>	1kbps #32-0A	32kbps #37-0A	1024kbps #31-0A
19980503 (MS14)	10.0	Up	<u>INTERMITTENT</u> <u>#35-0B</u>	1kbps #32-0B	8kbps #32-3B	
		Down	INTERMITTENT #35-0A	1kbps #32-0A	<u>8kbps</u> <u>#32-3A</u>	1024kbps #31-0A
19980601 (WS21)	0.2	Up	INTERMITTENT #35-0B	1kbps #32-0B	32kbps #37-0B	<u>1024kbps</u> <u>#31-0B</u>
		Down	INTERMITTENT #35-0A	<u>4kbps</u> <u>#32-2A</u>	32kbps #37-0A	4096kbps #31-2A
19980605 (WS22)	5.0	Up	INTERMITTENT #35-0B	1kbps #32-0B	32kbps #37-0B	<u>4096kbps</u> <u>#31-2B</u>
		Down	INTERMITTENT #35-0A	<u>1kbps</u> <u>#32-0A</u>	32kbps #37-0A	1024kbps #31-0A
19980614 (WS23)	0.1	Up	INTERMITTENT #35-0B	1kbps #32-0B	32kbps #37-0B	<u>1024kbps</u> <u>#31-0B</u>
		Down	INTERMITTENT #35-0A	<u>2kbps</u> <u>#32-1A</u>	32kbps #37-0A	2048kbps #31-1A

NOTE: UNDERLINED CHANNELS ARE CURRENTLY IN USE.

FIG.6

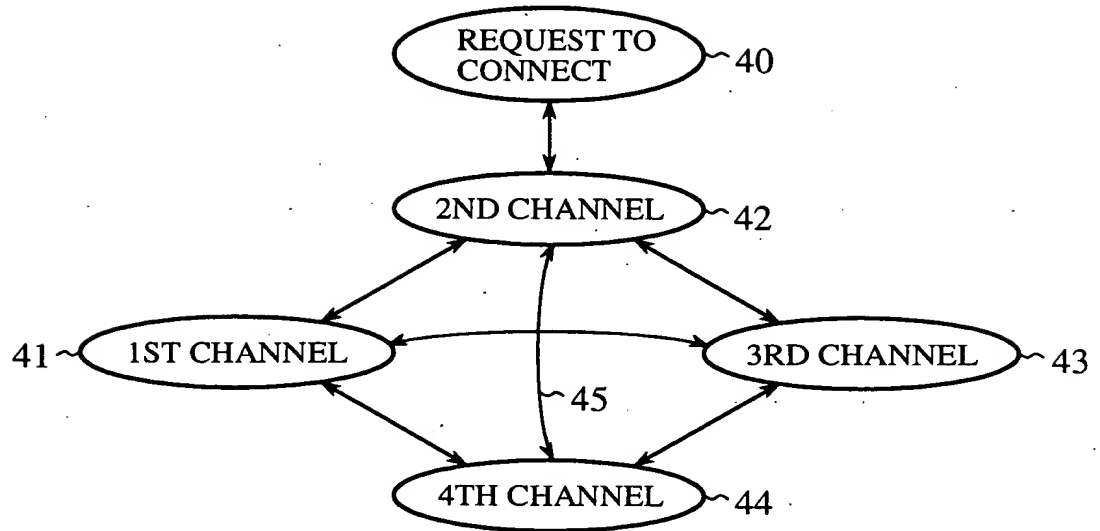


FIG.8

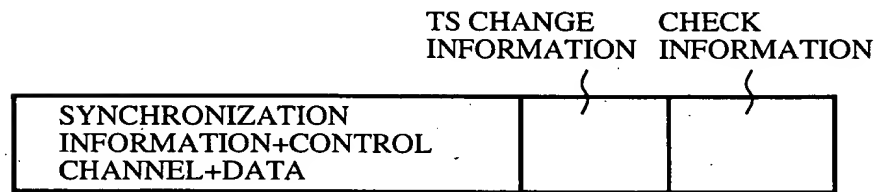


FIG.11

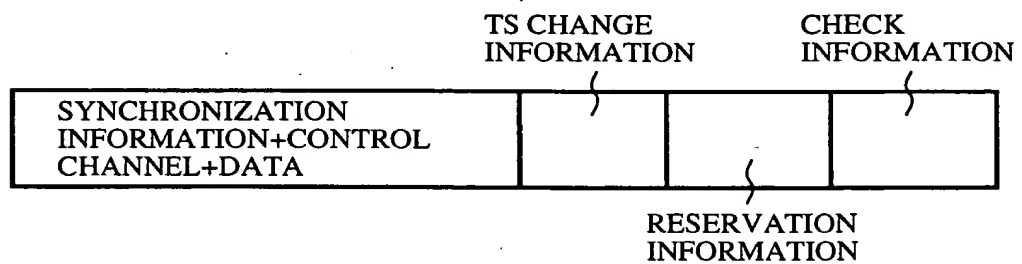


FIG.12

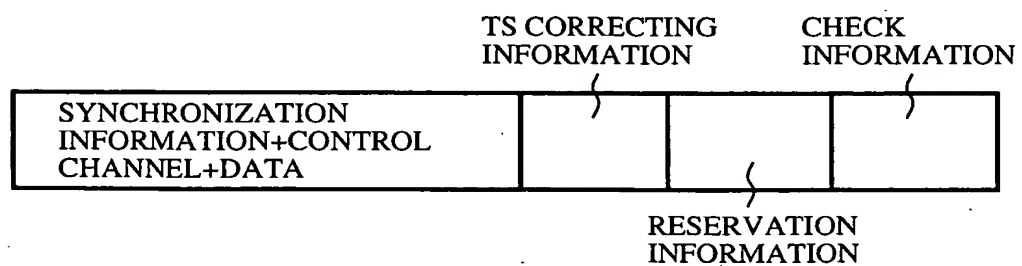


FIG. 7

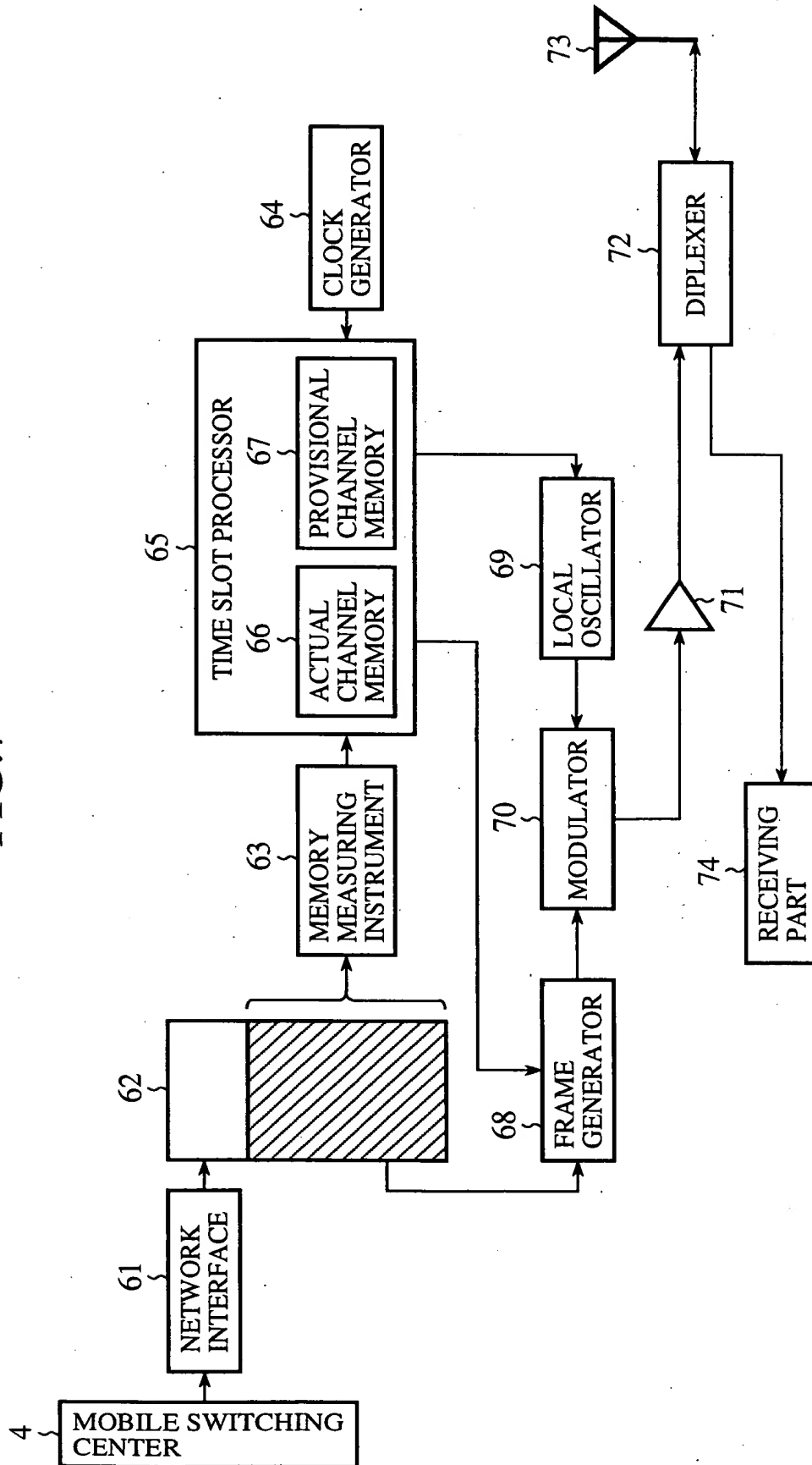


FIG.9

## CHANNEL ASSIGNMENT BEFORE ACTUAL USE

MOBILE STATION NO.	SWITCHING TIME (ms)	Up-Link/ Down-Link	1ST CHANNEL USE/NONUSE	2ND CHANNEL USE/NONUSE	3RD CHANNEL USE/NONUSE	4TH CHANNEL USE/NONUSE
19980428 (MS11)	0.1	Up	INTERMITTENT #35-0B	1kbps <u>#32-0B</u>	8kbps #32-3B	1024kbps #31-0B
		Down	INTERMITTENT #35-0A	2kbps #32-1A	32kbps <u>#37-0A</u>	2048kbps #31-1A
19980429 (MS12)	0.2	Up	<u>INTERMITTENT</u> <u>#35-0B</u>	1kbps #32-0B	32kbps #37-0B	1024kbps #31-0B
		Down	<u>INTERMITTENT</u> <u>#35-0A</u>	4kbps #32-2A	<b>32kbps</b> <b>#37-0A</b>	4096kbps #31-2A

NOTE 1: UNDERLINED CHANNELS ARE CURRENTLY IN USE.

NOTE 2: BOLD FACED CHANNEL (#37-0A OF MS12) CANNOT BE USED  
BECAUSE MS11 HAS ACTUALLY ASSIGNED THE SAME SLOT.



FIG.10

## CHANNEL ASSIGNMENT BEFORE ACTUAL USE

MOBILE STATION NO.	SWITCHING TIME (ms)	Up-Link/ Down-Link	1ST CHANNEL USE/NONUSE	2ND CHANNEL USE/NONUSE	3RD CHANNEL USE/NONUSE	4TH CHANNEL USE/NONUSE
19980428 (MS11)	0.1	Up	INTERMITTENT <u>#35-0B</u>	1kbps <u>#32-0B</u>	8kbps <u>#32-3B</u>	1024kbps <u>#31-0B</u>
		Down	INTERMITTENT <u>#35-0A</u>	2kbps <u>#32-1A</u>	32kbps <u>#37-0A</u>	2048kbps <u>#31-1A</u>
19980429 (MS12)	0.2	Up	INTERMITTENT <u>#35-0B</u>	1kbps <u>#32-0B</u>	32kbps <u>#37-0B</u>	1024kbps <u>#31-0B</u>
		Down	INTERMITTENT <u>#35-0A</u>	4kbps <u>#32-2A</u>	32kbps <u>#37-3A</u>	4096kbps <u>#31-2A</u>

NOTE 1: UNDERLINED CHANNELS ARE CURRENTLY IN USE.

NOTE 2: SINCE MS11 HAS ACTUALLY ASSIGNED #37-0A,

MS12 IS ASSIGNED ANOTHER SLOT (#37-3A).

FIG.13

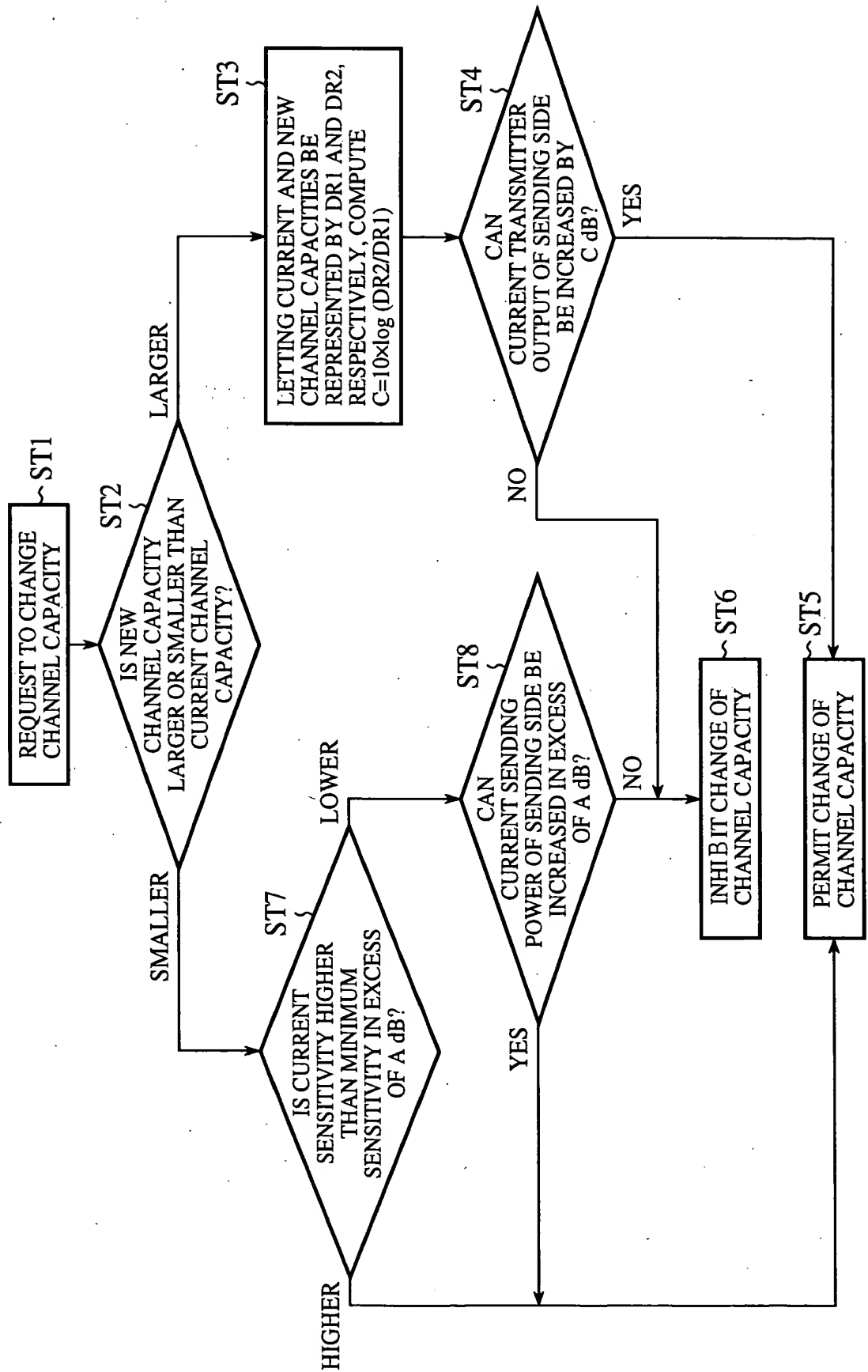


FIG.14

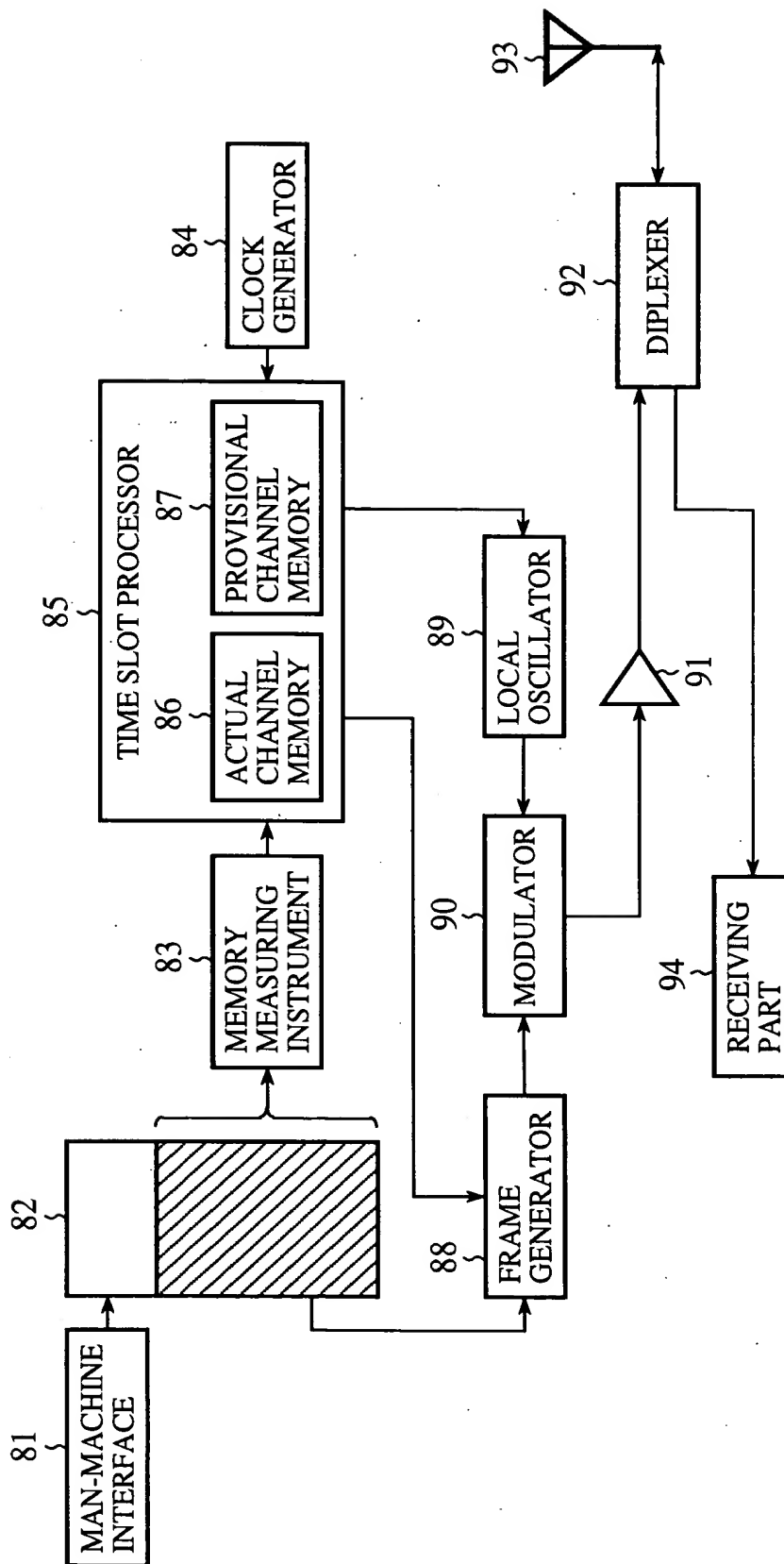


FIG.15

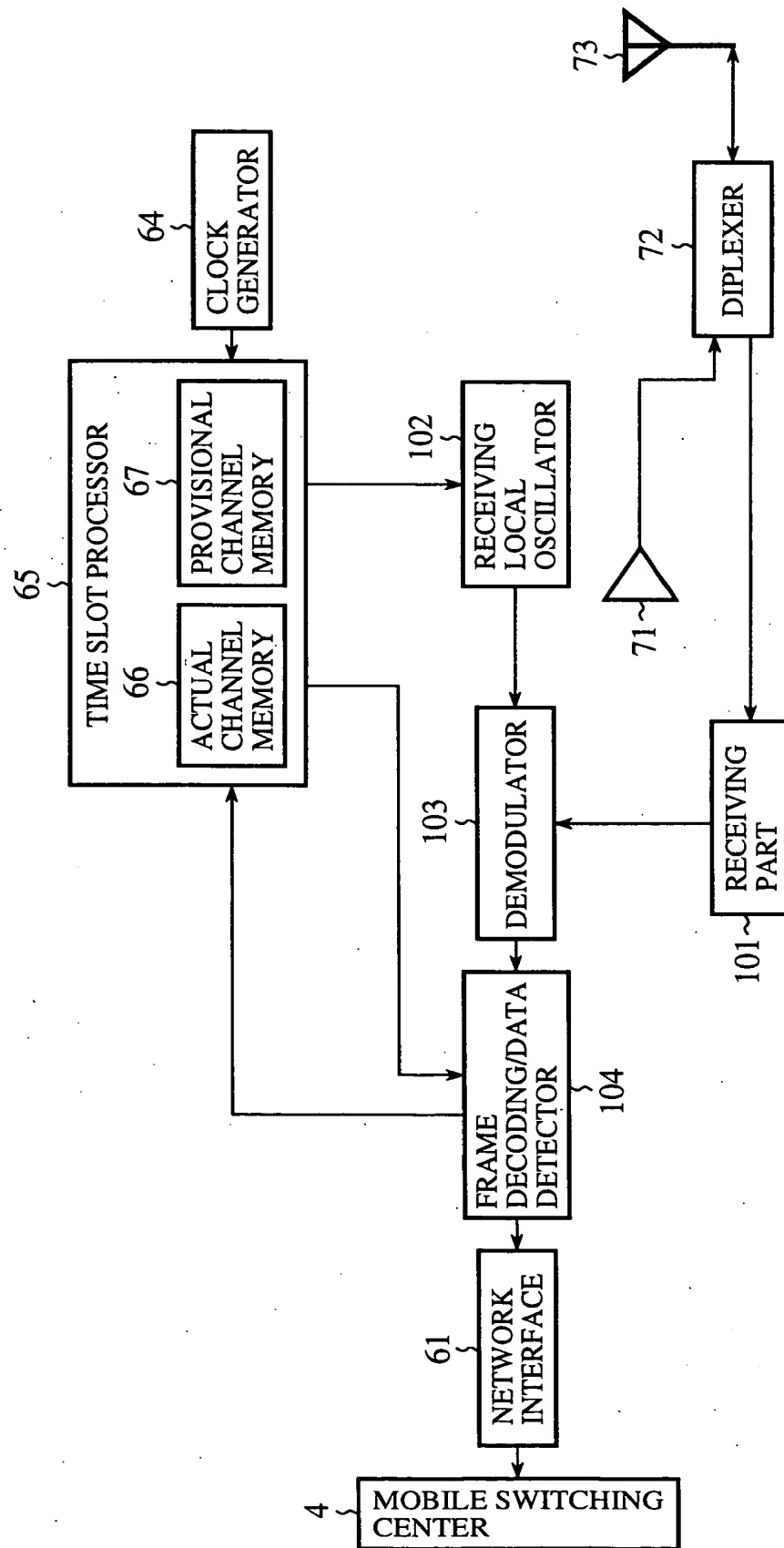


FIG.16

